

AMENDMENTS TO THE CLAIMS

1. (Original) A method of determining the risk of an individual developing a metabolic disorder, the method comprising:
 - (i) detecting in a sample from the individual the presence or absence of the ER22/23EK polymorphism in the glucocorticoid receptor gene; and
 - (ii) determining the likelihood of the individual developing a metabolic disorder, wherein the presence of the ER22/23EK polymorphism is indicative of a low risk of developing the metabolic disorder and the absence of the ER22/23EK polymorphism is indicative of a high risk of developing the metabolic disorder.
2. (Original) A method according to claim 1 wherein the metabolic disorder is cardiovascular disease.
3. (Original) A method according to claim 1 wherein the metabolic disorder is glucose intolerance or diabetes mellitus.
4. (Original) A method of predicting the longevity of an individual, the method comprising:
 - (i) detecting in a sample from the individual the presence or absence of the ER22/23EK polymorphism in the glucocorticoid receptor gene; and
 - (ii) determining the life expectancy of the individual, wherein the presence of the ER22/23EK polymorphism is indicative of a long life expectancy.
5. (Original) A method of determining the dose of glucocorticoid for administration to an individual in need thereof, the method comprising:
 - (i) detecting in a sample from the individual the presence or absence of the ER22/23EK polymorphism in the glucocorticoid receptor gene; and
 - (ii) determining whether the dose of glucocorticoid for administration to

the individual should be altered compared to the standard dosage, wherein the presence of the ER22/23EK polymorphism indicates that the dosage should be increased.

6. (Original) A method according to claim 5 wherein the individual is suffering from an allergic disease, an autoimmune disease, an inflammatory disorder, a neoplastic disease, graft rejection, sarcoidosis, vitamin D intoxication, thyroid storm, septic shock, cerebral edema, altitude sickness, chronic bronchitis or emphysema.

7. (Original) A method according to claim 5 wherein the glucocorticoid is selected from Hydrocortisone, Prednisone, Prednisolone, Methylprednisolone, Triamcinolone, Dexamethasone, Budesonide, Betamethasone and Beclomethasone.

8. (Original) A method according to any one of the claim 1, 4 and 5 wherein step (i) comprises contacting a sample from the individual with a specific binding agent for the ER22/23EK polymorphism and determining whether the agent binds to the polymorphism.

9. (Original) A method according to claim 8 wherein the agent is a nucleotide binding agent.

10. (Original) A method according to claim 9 wherein the nucleotide binding agent is an oligonucleotide probe or primer.

11. (Currently Amended) A method according to claim 8 [[10]] wherein the agent is a polypeptide binding agent.

12. (Original) A method according to claim 11 wherein the polypeptide binding agent is an antibody.

13. (Original) A method of determining whether a treatment regimen is suitable for an individual having a metabolic disorder, the method comprising:

- (i) detecting in a sample from the individual the presence or absence of the ER22/23EK polymorphism in the glucocorticoid receptor gene; and
- (ii) determining whether the treatment is suitable for the individual, wherein the suitability of the treatment depends on the presence or absence of the ER22/23EK polymorphism.

14. (Original) A method for diagnosing and treating an individual susceptible to a metabolic disorder, the method comprising:

- (i) detecting in a sample from the individual the presence or absence of the ER22/23EK polymorphism in the glucocorticoid receptor gene; and
- (ii) administering to an individual having the ER22/23KK polymorphism a therapeutically effective amount of an agent which prevents or treats the metabolic disorder.

15. (Original) A method for increasing the life expectancy of an individual, the method comprising:

- (i) detecting in a sample from the individual the presence or absence of the ER22/23EK polymorphism in the glucocorticoid receptor gene; and
- (ii) introducing into the individual an allele of the glucocorticoid receptor gene or a glucocorticoid receptor, wherein said gene or polypeptide does not have said polymorphism.

16. (Original) A method for identifying an agent for use in the treatment of a metabolic disorder or for increasing life expectancy, the method comprising:

- (i) contacting a glucocorticoid receptor polypeptide having the sequence shown in SEQ ID NO: 1 or a fragment thereof which includes the ER22/23EK polymorphism with a test agent;

- (ii) monitoring binding of the test agent to the polypeptide; and
- (iii) determining whether said test agent may increase life expectancy or be suitable for treating a metabolic disease, wherein for increasing life expectancy or treating a metabolic disease agent is one that binds to the polypeptide.

17. (Original) A method according to claim 16 wherein said glucocorticoid receptor polypeptide is in a non-human animal which is transgenic for a polynucleotide having the sequence shown in SEQ ID NO: 1.